

MASSACHUSETTS ENDANGERED PLANTS

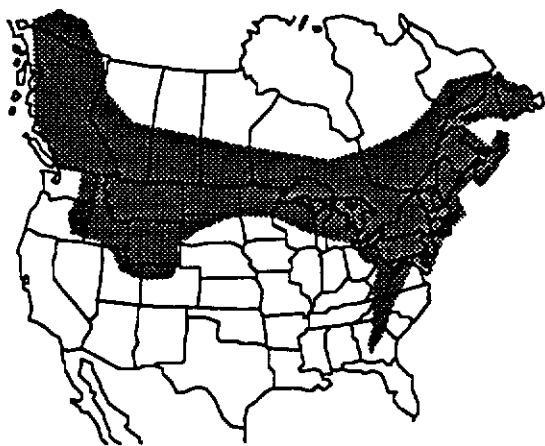
SMALL YELLOW LADY'S-SLIPPER (*Cypripedium calceolus* L. var. *parviflorum* Salisb.)

Description

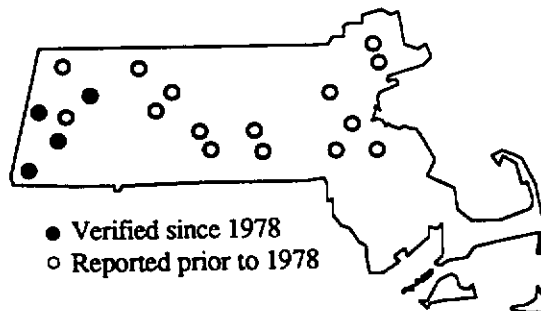
Small Yellow Lady's-slipper is an herbaceous perennial in the Orchid Family (Orchidaceae) which grows to approximately 35 cm (14 in.) in height. The plant has three--or occasionally four or five--large, oval or elliptic leaves with prominent veins. In Massachusetts, this small, delicate orchid blooms from the last week in May through the third week of June, sending up one or two showy, highly fragrant flowers from a single, leafy stalk. The blossoms have a deep golden yellow lip that is enlarged into a hollow, inflated pouch, two spirally twisted side petals and two broad sepals, one above and one below the pouch. The sepals (members of the outermost floral whorl) and side petals are purplish brown, varying rarely to greenish brown. The pouch is often speckled with crimson spots inside and is usually veined with dark red along the "pleats" of the pouch. The "slipper" averages about 2-2.5 cm (3/4 - 1 in.) in length and has a pleasant vanilla fragrance. The fruit is an ellipsoid capsule (a type of dry fruit derived from a compound pistil). Small Yellow Lady's-slipper is



Newcomb, L. Newcomb's Wildflower Guide. Little, Brown and Company, Boston, 1977.



Documented Range of Small Yellow
Lady's-slipper



● Verified since 1978
○ Reported prior to 1978

Massachusetts Distribution by Town

variously considered to be a variety of *Cypripedium calceolus* L., a subspecies of *C. calceolus* L. or as the distinct species *Cypripedium parviflorum*.

Range

The documented range of Small Yellow Lady's-slipper includes local habitats from Newfoundland and Nova Scotia westward to Yukon and British Columbia, and south to Pennsylvania, the Appalachians to Georgia, northern Illinois, western Nebraska, Colorado and Oregon. In Massachusetts, recently observed occurrences have been limited to only four towns in the western part of the state. Historical specimen records show that this variety occurred in many more localities throughout Massachusetts prior to the middle part of this century. (Additional historic specimens, which cannot be conclusively identified, may also be Small Yellow Lady's-slipper.)

Similar Species

Small Yellow Lady's-slipper is most similar to the Large Yellow Lady's-slipper (*Cypripedium calceolus* var. *pubescens*), the other North American variety of the same species. However, the larger variety may reach a height of 30 to 60 cm (11 4/5 - 23 3/5 in.) and has a pouch which may be more than 4 cm. (1 3/5 in.) long--although it may be as small as 2.5 cm (1 in.). The leaves are usually broader than those of the small variety, the flower sepals and petals are greenish brown rather than purplish brown, and the flower is not fragrant. This variety blooms several weeks earlier than Small Yellow Lady's-slipper, and its habitat is also more variable. Unlike the Small Yellow Lady's-slipper, it is usually found in rich, upland, often rocky forests, with Sugar Maple and White Ash. Large Yellow Lady's-slipper also frequently occurs near small, vernal streams.

Habitat in Massachusetts

Small Yellow Lady's-slipper grows in swamps and semi-open calcareous fens (peat-forming wetlands in which cold, alkaline groundwater seeps to the surface), especially in limestone wetlands. It prefers light to moderate shade. Other plants found growing with Small Yellow Lady's-slipper include Spicebush (*Lindera benzoin*), Purple-stemmed Aster (*Aster puniceus*), Skunk Cabbage (*Symplocarpus foetidus*), Pennsylvania Bitter Cress (*Cardamine pensylvanica*), Rough Bedstraw (*Galium asprellum*), Naked Mitre Wort (*Mitella nuda*), Black Ash (*Fraxinus nigra*), Red Maple (*Acer rubrum*) and Cinnamon Fern (*Osmunda cinnamomea*). Rare Massachusetts plants that have been found with Small Yellow Lady's-slipper include Showy Lady's-slipper (*Cypripedium reginae*), Hemlock Parsley (*Conioselinum chinense*) and Swamp Red Currant (*Ribes triste*).

Population Status

Small Yellow Lady's-slipper is presently listed as "Endangered" in Massachusetts, where it has only four current stations (discovered or verified since 1978). Over the past 76 years, this plant has apparently declined significantly in this state, possibly due to habitat loss from the filling of wetlands and the alteration of natural water levels, especially in the eastern part of the state. This species is also considered rare in Illinois, Kentucky, New Hampshire, Pennsylvania, Rhode Island, Alaska, Colorado, Idaho, Vermont, Utah, Wisconsin, Georgia, Indiana, Montana, Ohio, and Washington. The plant was present historically in Oregon.